United States

Department of the Interior

Bureau of Land Management

Miles City Field Office

Greenwood Scoria

Environmental Assessment (EA)
DOI-BLM-MT-C020-2013-0200-EA

For Further Information Please Contact:

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ALTERNATIVE 1 - PROPOSED ACTION

The Proposed Action would be to issue a negotiated contract for the sale of mineral materials for 10,000 BCY of scoria to Greenwood Trucking. The contract would authorize the continuation of mining of federally owned scoria and would consist of using a backhoe, bulldozer or similar equipment to excavate material from the pit. The material would be loaded and hauled from the site by a front-end loader and dump trucks, with no drilling or blasting. The material could be screened and-or crushed using a gravel crusher and a grizzly screen or other classifier for the purpose of restricting the size of material entering the screen. The material is an in situ scoria deposit. The scoria seam is located within a 0.6 acre portion of the existing 5 acres of disturbance. No new surface disturbance is proposed with this action.

No materials or equipment would be stored at the site except when Greenwood Trucking is actively mining and hauling material from the site. These time periods would typically last a few weeks or less. Sedimentation and-or erosion control structures would be installed and maintained as necessary to prevent excessive sediment loss from the site. Greenwood Trucking would be responsible for eradicating all weeds at the site and ensuring that material used from the pit would not introduce weeds into other locations. Greenwood Trucking would ensure that the site remains weed free for a term of 5 years after the permits expire. In addition, all vegetation and the upper one foot of material (rock/topsoil) from the work area would be stripped and stockpiled at the site's perimeter. This material would be clearly labeled with signs and is not available for disposal. This stockpile would be "hidden" from site if at all possible. Every attempt would be made to blend in with the surrounding landscape using existing lines, colors, form, etc.

Greenwood Trucking would be solely responsible for operating and maintaining the site in a safe and prudent manner. In particular, Greenwood Trucking would ensure that no unstable slopes are left unattended, and that the operations would not pose any hazards to the nearby State Highway 16 or other existing rights of ways. Greenwood Trucking would use Best Mining Practices, e.g., stripping only the minimum amount of area necessary for immediate use, seeding topsoil stockpiles that would not be used for reclamation within 1 year, etc. Greenwood Trucking would obey all applicable laws and regulations, e.g., Mine Safety and Health Administration regulations regarding training plans, required levels of training, and occupational noise exposure (30 CFR 46, 62). Greenwood Trucking has obtained a permit (insert state permit number) to operate this pit from the Montana DEQ Opencut Bureau.

Reclamation would consist of removing all non-native items from the site. All areas of surface disturbance would be scarified, graded to blend with adjacent topography (including reducing all slopes to less than (2H: 1V), and seeded. Greenwood Trucking would rip and re-contour all roads to blend with the natural landform.

Stockpiled soil material would be re-applied to all disturbed areas. Any brush, rocks and other natural debris would be replaced over the disturbed area to blend with the adjacent, undisturbed areas and minimize visual impacts.

The goals of reclamation would be:

1) Stabilize and protect surface soils for the purpose of minimizing wind and soil erosion
2) Meet post mining land uses

3) Protect surface and ground water resources
4) Protect public health by eliminating hazards
5) Minimize and reduce long-term visual impacts
6) Re-grade and reseed site
7) Reclaim and re-vegetate operational roads and other disturbed areas
8) Control weeds at the site 5 years after permit expires

The re-vegetation component of reclamation would be considered complete when the native plant community is self-perpetuating and similar to adjacent undisturbed lands. Species composition, richness, and total ground cover would be appropriate for the native plant community with at least at 60% perennial native vegetation. All reclamation activities would be completed by the expiration date of Greenwood Trucking's final contract, except for any necessary continued re-seeding and weed control activities. Seed application procedures would follow established protocols and best knowledge regarding reclamation of scoria pits.

Contract for Sale (of scoria)
MTM 103008 (S. Greenwood Trucking)

Figure 1
SWSW Section 35, T27N, R56E
Richland Co., MT
Surface: D. Herness; "Other Minerals": USA
Operator: S. Greenwood Trucking
Sidney, MT

N
W E
S

1:3,000

Projected Coordinate System: NAD 1983 Albers
Geographic Coordinate System: GCS North American 1983
Datum: D North American 1983

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MILES CITY FIELD OFFICE

All disturbed areas on fee surface shall be seeded in accordance with the surface owner's requirements. BLM recommends the following BLM-approved seed mixture below:

Ecological Site: Silty-Steep MLRA 58A or 60B 10-14 p. z.*							
Scientific Name	**NRCS Common Name**	**Preferred Variety**	**Ratio**	**avg. seeds/lb.**	**PLS/ft^2**	**PLS/ac**	**PLS lb./ac**
Grasses							
Bouteloua curtipendula	sideoats grama	Killdeer	0.15	191,000	12	522,720	2.74
Nassella viridula	green needlegrass	Lodorm	0.10	186,000	8	348,480	1.87
*Pascopyrum smithii***	western wheatgrass	Rosana	0.15	110,000	12	536,659	4.88
Pseudoroegneria spicata	bluebunch wheatgrass	Goldar	0.35	139,000	28	1,219,680	8.77
Forbs							
Dalea purpurea var. purpurea	purple prairie clover	Bismarck	0.05	210,000	4	174,240	0.83
Echinacea angustifolia var. angustifolia	blacksampson echinacea	Bismarck	0.05	128,000	4	174,240	1.36
Ratibida columnifera	upright prairie coneflower	Stillwater	0.05	737,000	4	174,240	0.24
Shrubs							
Artemisia cana	silver sagebrush	none	0.05	850,000	4	174,240	0.20
Atriplex gardneri (A. nuttallii)	Gardner's saltbush	none	0.025	111,500	2	87,120	0.78
Krascheninnikovia lanata	winterfat	Open Range	0.025	56,700	2	87,120	1.54
Total			**1.00**		**80**	**3,498,739**	**23.21**

*Broadcast seed rate (preferred method). Cut rate in half if drill seeding.

**Thickspike wheatgrass (Elymus lanceolatus ssp. lanceolatus), variety Critana, may be substituted for western wheatgrass.

***White prairie clover (Dalea candida var. oligophylla), preferred variety Antelope, or American vetch (Vicia americana) can be substituted for purple prairie clover.

The recommended drill seeding rate for large, seeded species is 20 PLS/ft^2. The recommended drill seeding rate for small seeded species (most BLM seed mixes) is 30-40 PLS/ft2. Broadcast or aerial seedings are recommended at the rate of 60-80 PLS/ft2 (approx. double the drilled rate). This is not the final mix, purity and germination rates must be incorporated in order to get final seeding rate (see spreadsheet 2).